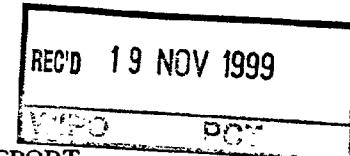


PATENT COOPERATION TREATY

PCT

EPO - DG I
03.12.1999
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference QAPA392PCT | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/US98/04799 | International filing date (day/month/year) 04 MARCH 1998 (04.03.1998) | Priority date (day/month/year) 11 MARCH 1997 |
| International Patent Classification (IPC) or national classification and IPC IPC(6): H04L 9/06 and US Cl.: 380/09 | | |
| Applicant QUALCOMM INCORPORATION INCORPORATED | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

| | |
|---|---|
| Date of submission of the demand 29 September 1996 (29.09.1996) | Date of completion of this report 04 November 1999 (04.11.1999) |
| Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230 | Authorized officer Tod R Swann Telephone No. 305-9700 |

I. Basis of the report

1. With regard to the elements of the international application:*

 the international application as originally filed. the description:pages 1-13 as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____. the claims:pages 14-16, as originally filedpages NONE, as amended (together with any statement) under Article 19pages NONE, filed with the demandpages NONE, filed with the letter of _____. the drawings:pages 1-6, as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____. the sequence listing part of the description:pages NONE, as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. The amendments have resulted in the cancellation of: the description, pages NONE the claims, Nos. NONE the drawings, sheets/fig none5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/04799

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

| | | |
|-------------------------------|--------------|-----|
| Novelty (N) | Claims 1-20 | YES |
| | Claims 21-23 | NO |
| Inventive Step (IS) | Claims none | YES |
| | Claims 1-23 | NO |
| Industrial Applicability (IA) | Claims 1-23 | YES |
| | Claims NONE | NO |

2. CITATIONS AND EXPLANATIONS (Rule 70.7)

Claims 1-20 meet the novelty requirement in that a single reference does not teach or fairly suggest the claimed invention.

Claims 21-23 lack novelty under PCT Article 33(2) as being anticipated by Alanaraet US Patent No. 5,594,797.

Claims 21-23 lack novelty under PCT Article 33(2) as being anticipated by Reeds, US Patent No. 5,159,634.

Claims 21 and 22 lack novelty under PCT Article 33(2) as being anticipated by Shimada, US Patent No. 5,687,238.

Claims 1-23 lack inventive step under PCT Article 33(2) as being anticipated by Alanaraet, US Patent No. 5,594,797 in view of Shimada, US Patent No. 5,687,238. Alanaraet teaches a method of transforming a set of message signals comprising a first encryption step, a self inverting encryption step, and a reverse encryption step. Alanaraet also discloses all limitations in claims 2-23. Alanaraet does not explicitly teach a second encryption step and a second reverse encryption step. However, Shimada discloses these steps.

Claims 1-23 meet the Industrial Applicability requirement in that a method of transforming a set of message signals is a useful and applicable invention for data security.

----- NEW CITATIONS -----
US 5,687,238 A (SHIMADA) 11 NOV 1997, see abstract, col. 1: 39-59.